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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,894	03/31/2004	Stephen H. Tang	INTEL-0056	4982

34610 7590 08/18/2006

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EXAMINER	
PHAN, TRONG Q	
ART UNIT	PAPER NUMBER
2827	

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/812,894	TANG ET AL.	
	Examiner	Art Unit	
	TRONG PHAN	2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumura et al., 5,365,475, in view of Oliver, 4,567,577.

Matsumura et al., 5,365,475, discloses in Fig. 15 a memory system comprising:

micro processor 104;

program memory 106 comprising a plurality of SRAM cells 2

as shown in Fig. 3, each of SRAM cells 2 comprising:

first transistor pair 21 and 23 coupled between voltage supply line 27 and GROUND 28;

second transistor pair 22 and 24 coupled between voltage supply line 27 and GROUND 28; voltage supply line 27 selectively connect to first supply voltage V1 in a first mode and connected to a second supply voltage V2 in a second mode;

first access transistor 256;

second access transistor 26;

What is not shown in Figs. 3 and 15 of Matsumura et al., 5,365,475, is the bias transistor as recited in claims 1-8 and 30-35 and the switching device as recited in claims 9-29 and 36-37.

Oliver, 4,567,577, discloses in Fig. 2 the teaching of activating NMOS transistor 35 for applying a forward negative bias voltage VSS to the substrate of the two transistors 25 and 27 of the SRAM cell (four transistors 24, 25, 27 and 29) in response to the WRITE signal on line 38 is inactive which is inherently present only during the non-ACTIVE WRITE mode/state of the memory device (see lines 1-10, column 3). This effect is called a body effect and uses the so-called back gate bias to control transistor 25 and 27 (see lines 14-20, column 3).

It would have been obvious under 35 USC 103(a) to one of ordinary skill in the art at the time of the invention was made to modify Figs. 3 and 15 of Matsumura et al., 5,365,475, by the teaching as taught in Fig. 2 of Oliver, 4,567,577, for the purpose of providing the body effect to during the non-ACTIVE WRITE mode/state of the memory device to prevent overdrive or overpower the previous state of the SRAM cell in Figs. 3 and 5 of Matsumura et al., 5,365,475 (see lines 14-20, column 3 of Oliver, 4,567,577).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Response to Arguments

4. Applicant's arguments filed on 6/6/06 have been fully considered but they are not persuasive because of the following reasons:

All objections to the drawings of the present invention and to the specification as set forth in paragraphs 1-3 of the last office action of 3/6/06 have been withdrawn in view of Applicant's amendments.

Oliver, 4,567,577, does clearly disclose in Fig. 2 the teaching of activating NMOS transistor 35 for applying a forward negative bias voltage VSS to the substrate of the two transistors 25 and 27 of the SRAM cell (four transistors 24, 25, 27 and 29) in response to the WRITE signal on line 38 is inactive which is inherently present only during the non-ACTIVE WRITE mode/state of the memory device (see lines 1-10, column 3). This effect is called a body effect and uses the so-called back gate bias to control transistor 25 and 27 (see lines 14-20, column 3). Therefore, the rejection of claims 1-37 under 35 U.S.C. 103(a) as being unpatentable over Matsumura et al., 5,365,475, in view of Oliver, 4,567,577, is still considered to be totally proper, is repeated and is made FINAL as set forth above.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRONG PHAN whose telephone number is (571) 272-

1794. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AMIR ZARABIAN can be reached on (571)272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

phan 3/20/07

TRONG PHAN
PRIMARY EXAMINER